

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A metal member to be cast-wrapped by a metal cast article, wherein said metal member to be cast-wrapped has an extruded roughened surface portion ~~defined by surface tears producing~~ resulting from tearing of a surface portion of a metal material by hot extrusion through a die to produce a plurality of irregularly formed projections which extend outwardly from said surface, and wherein a maximum width of said projections at a tip end portion thereof is wider than a maximum width of the projections at a base portion thereof.

Claim 2 (Previously presented): A metal member to be cast-wrapped as claimed in claim 1, wherein at least a part of said tip end portion of each of said projections is formed in a tapering sharp sectional shape.

Claim 3 (Previously presented): A metal member to be cast-wrapped as claimed in claim 1 or 2, wherein said extruded, roughened surface is arranged as elongated mutually spaced surface portions extending parallel to a direction of extruding of the member and wherein elongated smooth, unroughened surface portions are disposed between, and extend parallel to, said roughened surface portions.

Claim 4 (Previously presented): A metal member to be cast-wrapped as claimed in claim 3, wherein a side of each of said irregularly formed projections facing an extrusion starting end is wide and high, and a side of each of said irregularly formed projections facing an extrusion completing end is narrow and low.

Claim 5 (original): A metal member to be cast-wrapped as claimed in claim 1 or 2, wherein said metal member to be cast-wrapped is a hollow cylindrical body.

Claims 6-13 (Canceled).

Claim 14 (Currently amended): A metal member to be cast-wrapped by a metal cast article as claimed in claim 1, wherein said metal member is a cylindrical member that has an outer surface having at least one extruded roughened surface portion ~~defined by~~ resulting from tearing of at least one said surface portion of the cylindrical metal material by hot extrusion through a die to produce ~~tears producing~~ said irregularly formed projections extending outwardly from said surface, said projections of a roughened surface portion being arranged in a row extending parallel to an axis of the cylindrical member and at intervals spaced circumferentially about the cylindrical member.

Claim 15 (Previously presented): A metal member to be cast-wrapped by a metal cast article as claimed in claim 14, wherein each of said projection-defining tears has a tip end portion bent laterally.

Claim 16 (Previously presented): A metal member to be cast-wrapped by a metal cast article as claimed in claim 14, wherein unroughened grooves are provided between circumferentially adjacent rows of projection-defining tears.

Claim 17 (Previously presented): A metal member to be cast-wrapped by a metal cast article as claimed in claim 14, wherein said roughened surface contains rows of projections ~~defining tears~~ resulting from said tearing, said rows being arranged at regular intervals about the circumference of said cylindrical member.

Claim 18 (Previously presented): A metal member to be cast-wrapped by a metal cast article as claimed in claim 14, wherein said projection-defining tears are arranged at irregular intervals in said rows and generally out of circumferential alignment.

Claim 19 (Previously presented): A metal member to be cast-wrapped by a metal cast article as claimed in claim 14, wherein said cylindrical member is hollow.

REMARKS

Applicants' attorney wishes to thank the Examiner for the courteous and helpful interview to today during which the present amendments to the claims were discussed.

Only claims 1-5 and 14-19 are being prosecuted in this application. Applicants note that there is no prior art rejection of claims 3, 4 and 16 in the office Action and assume that these claims would be allowable if the rejection of indefiniteness under 35 U.S.C. §112, second paragraph, is overcome. Applicants have amended claims 1 and 14 in response to the Office Action and the claims are now believed to be definite. Removal of that rejection and allowability of claims 3, 4 and 16 are respectfully requested.

The present invention, as now provided in the amended claims is to a metal member that is to be cast-wrapped by a metal cast article, where the metal member has an extruded roughened surface portion, resulting from tearing of a surface portion of a metal material by hot extrusion through a die to produce a plurality of irregularly formed projections extending outwardly from the surface, and where a maximum width of the projections at a tip end portion thereof is wider than a maximum width of the projections at a base portion thereof. Such a metal member to be cast-wrapped is not taught or suggested in the cited reference.

In the Office Action, claims 1, 2, 5, 14, 15 and 17-19 have been rejected under 35 U.S.C. §102(b) as anticipated by the teachings of JP 49-44857 to Toyo Kogyo Co.

As Applicants have previously discussed in JP '857, the projections presented in FIG. 2 of

the reference as (5) are regularly disposed elements that have a uniform shape such as would result in projections produced by a rolling operation. The JP '857 reference does not show projections encompassed by the present claims. That reference does not show or encompass projections wherein a "maximum width of said projections at a tip end portion thereof is wider than a maximum width of the projections at a base portion thereof" as is required in Applicants' claims.

In the response to arguments presented in the last Amendment, the Office Action notes that it is argued that the prior art product does not comprise a tip width wider than a base width. It is alleged, however, that there is "no definition of where the base ends and the projection begins" and thus that the claimed width relationship is taught in the reference.

Applicants do not believe this is a reasonable rejection. A "base" or base member is normally defined as the lowest or bottom part of an object and a "tip" is normally defined as the end of an object, especially of a pointed or projecting object. One skilled in the art would know what the terms "base" and "tip" mean in the claims, and that the claimed structure is not taught or suggested by the Toyo Kogyo reference. Note at page 9 of the Substitute Specification where the base portion is identified as near a surface of groove 21 of sleeve 19.

With respect to the structure of the '857 member, it is clear that the projections are regularly disposed and have a uniform shape since they are produced by rolling. In Applicants metal member, the roughened surface portion results from tearing of a surface of a metal material by hot extrusion through a die to produce irregularly formed projections.

In view of the present amendments to the claims and the above remarks, Applicants' claims 1-5 and 14-19 are all believed to be definite and patentable and early action towards allowance thereof is respectfully requested.

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Reply to OA dated May 17, 2005

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,
HANSON & BROOKS, LLP



William G. Kratz, Jr.
Attorney for Applicant
Reg. No. 22,631

WGK/nrp
Atty. Docket No. 020121
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



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